

CLAIMS

What is claimed is:

1 1. A method of specifying a structure, within a computer system, of an instance of a
2 class, the method including the step of:
3 associating with said instance of said class an attribute that is not in said class or any
4 superclass of said class, thereby establishing for said instance said structure
5 that includes storage for data associated with said attribute.

1 2. The method of claim 1 wherein the step of associating further includes
2 the steps of:
3 establishing a property bundle that is associated with one or more attributes that are
4 not in said class or any super class of said class; and
5 associating said instance with said property bundle.

1 3. The method of claim 2 further comprising the step of:
2 storing within a database, objects that define said instance, said property bundle, and
3 said one or more attributes.

1 4. The method of claim 1 further comprising the step of:
2 maintaining an object relational mapping system that indicates a correlation between
3 said instance and data stored in a relational database.

1 5. The method of claim 1 wherein said step of associating includes establishing a pointer
2 from said instance to a property bundle.

1 6. The method of claim 5 wherein said step of associating includes establishing a pointer
2 from said attribute to said property bundle.

1 7. The method of claim 1 wherein a property class contains said attribute.

1 8. The method of claim 1 further including the step of:
2 associating a key with said attribute wherein said key identifies said attribute.

1 9. The method of claim 8 wherein said key is a user defined key.

1 10. The method of claim 1 wherein the step of associating further includes the step of:
2 maintaining a table that includes an entry that indicates that said instance is associated
3 with said attribute.

1 11. The method of claim 10 wherein the step of maintaining a table further includes the step of:
2 maintaining said entry to include a key that identifies said attribute.

1 12. The method of claim 10 wherein the step of maintaining a table further includes the step of:
2 maintaining said table externally to said instance.

1 13. The method of claim 1 wherein the step of maintaining a table further includes the step of:
2 maintaining said table internally to said instance.

1 14. The method of claim 1 wherein the step of associating further includes the steps of:
2 storing into said instance a hash table; and
3 locating an entry in said hash table for said attribute.

1 15. The method of claim 14 further includes the steps of:

2 receiving data that is designated as a key for locating said entry in said hash table; and
3 using said data as said key to locate said entry without determining whether said data
4 conforms to software rules.

1 16. The method of claim 1 wherein the class is a file type and said instance is a file of
2 said file type in a file system wherein the step of associating includes associating with
3 said file of said file type an attribute that is not associated with said file type or any
4 super class of said file type.

1 17. A computer-readable medium carrying instructions for specifying a structure, within a
2 computer system, of an instance of a class, the instructions including instructions for
3 performing the step of:
4 associating with said instance of said class an attribute that is not in said class or any
5 superclass of said class, thereby establishing for said instance said structure
6 that includes storage for data associated with said attribute.

1 18. The computer-readable medium of Claim 17 wherein the step of
2 associating further includes the steps of:
3 establishing a property bundle that is associated with one or more attributes that are
4 not in said class or any super class of said class; and
5 associating said instance with said property bundle.

1 19. The computer-readable medium of Claim 18 further comprising instructions for
2 performing the step of:
3 storing within a database, objects that define said instance, said property bundle, and
4 said one or more attributes.

1 20. The computer-readable medium of Claim 17 further comprising
2 instructions for performing the step of:
3 maintaining an object relational mapping system that indicates a correlation between
4 said instance and data stored in a relational database.

1 21. The computer-readable medium of Claim 17 wherein said step of associating includes
2 establishing a pointer from said instance to a property bundle.

1 22. The computer-readable medium of Claim 21 wherein said step of associating includes
2 establishing a pointer from said attribute to said property bundle.

1 23. The computer-readable medium of Claim 17 wherein a property class contains said
2 attribute.

1 24. The computer-readable medium of Claim 17 further including instructions for
2 performing the step of:
3 associating a key with said attribute wherein said key identifies said attribute.

1 25. The computer-readable medium of Claim 24 wherein said key is a user defined key.

1 26. The computer-readable medium of Claim 17 wherein the step of associating further
2 includes the step of:
3 maintaining a table that includes an entry that indicates that said instance is associated
4 with said attribute.

1 27. The computer-readable medium of Claim 26 wherein the step of maintaining a table
2 further includes the step of:
3 maintaining said entry to include a key that identifies said attribute.

1 28. The computer-readable medium of Claim 26 wherein the step of maintaining a table
2 further includes the step of:
3 maintaining said table externally to said instance.

1 29. The computer-readable medium of Claim 17 wherein the step of maintaining a table
2 further includes the step of:
3 maintaining said table internally to said instance.

1 30. The computer-readable medium of Claim 17 wherein the step of associating further
2 includes the steps of:
3 storing into said instance a hash table; and
4 locating an entry in said hash table for said attribute.

1 31. The computer-readable medium of Claim 30 further including instructions for
2 performing the steps of:
3 receiving data that is designated as a key for locating said entry in said hash table; and
4 using said data as said key to locate said entry without determining whether said data
5 conforms to software rules.

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1 32. The method of claim 17 wherein the class is a file type and said instance is a file of
2 said file type in a file system wherein the step of associating includes associating with
3 said file of said file type an attribute that is not associated with said file type or any
4 super class of said file type.